3605-SCU-127
0044234

MAXWELL
S-CUBED Division

NARRATIVE

May 6, 1993

Narrative Project: 93-092
Reference No. 32468-03
Client: WHC
SDG No.: 3605

METALS

The samples were analyzed according to SW-846 Method 6010 for the CLP list. No dilutions were required for analysis. Cr and Fe were detected in the sample. Mn, Ni, and Zn were detected in the sample, but below the CRDL.

The quality control results were acceptable. Calibration data was acceptable. MS recovery for Ba and Pb were low. %RPD recovery was acceptable. Prep blanks was acceptable. All soil LCS recoveries were within the advisory ranges.

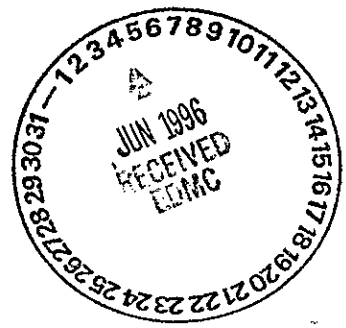
TOTAL ORGANIC CARBON

The samples were analyzed according to EPA Method 9060 by combustion and then IR analysis. Prior to analysis, a sample aliquot was measured and phosphoric acid was added to the soil. The mixture was placed in an oven at 70 C for one hour, then removed, cooled, and ground to a fine powder texture. The sample then went through the combustion and IR analysis process. The quality control results were acceptable. MS and %RPD recoveries were acceptable.

John DeWald
Project Manager

enclosures

r:\narr\n3605



SDG Memo/Sample Summary

Client Name:	WESTINGHOUSE HANFORD CO.	**Date:**	6 May 1993
Project Name:	93-092	**Update No.:**	
SDG No.:	3605	**Work Order No.:**	32468-03
Project Manager:	J. DEWALD		
Mail Date:			

Client Samp No.	S-Cubed Samp No.	Date Rcvd	Date Samp	Matrix	ICP6010	MTOC							
B08CM8	3605-01	4-9-1993	4-7-1993	NAL	X	X							
B08CM8MS	3605-01MS	4-9-1993	4-7-1993	NAL	X	X							
B08CM8MSD	3605-01MSD	4-9-1993	4-7-1993	NAL		X							
B08CM8REP	3605-01REP	4-9-1993	4-7-1993	NAL	X								

(X) = Non-Billable Sample

DOC 1

LOT #3605

Westinghouse Hanford Company	CHAIN OF CUSTODY	29

Custody Form Initiator MARY ANN GREEN

Company Contact MARY ANN GREEN/ LARRY ZUCK

Telephone 373-1463/ 372-3075

Project Designation/Sampling Locations SAF # 93-092/SAMPLE LOCATION 163N DAY TANK

Collection Date 4-7-93

Field Logbook No. WHC-N-587- #3

Ice Chest No. _____

Bill of Lading/Airbill No. _____

Offsite Property No. _____

Method of Shipment Glass sample bottle wrapped in a vermiculite blanket & pillow. placed inside a metal can which is placed in a plastic bag. Then it's placed into a fiberboard box with shoring.

Shipped to S-CUBED LABORATORIES, SAN DIEGO, CA

Possible Sample Hazards/Remarks CORROSIVE LIQUID

See Sample Analysis Request for individual containers and analysis.

Sample Identification

B08CM8 (1 GLASS BOTTLE)

[] Field Transfer of Custody

Chain of Possession (Sign and Print Names)

Relinquished by:	Received by:	Date/Time:
Mary Ann Green	Amy Smith	4-9-93 11:30AM
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:
Relinquished by:	Received by:	Date/Time:

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90) (EF) WEF061
Chain of Custody

UOM: 3

WESTINGHOUSE HANFORD COMPANY

SAMPLE ANALYSIS REQUEST

LOT # 3605

Collector MARY ANN GREEN Date 4-8-93

Company Contact MARY ANN GREEN/ LARRY ZUCK Telephone (509) 373-1463/ 372-3075

Sample Number	*	Date Collected	Time Collected	Number and Type of Sample Container Analysis Requested-Method Number
B08CM8	L	4-7-93	1100	ONE 500ML GLASS BOTTLE/ ICP METALS - 6010 AND TOC - 9060

*Type of Sample

A = Air
DL = Drum Liquids
DS = Drum Solids
T = Tissue
L = Liquids
O = Oil
S = Soil
W = Water
SE = Sediment
SL = Sludge
SO = Solid
Wi = Wipes
X = Other

Field Information: SULFURIC ACID FROM A STORAGE TANK

Special Handling and/or Storage: CORROSIVE

Possible Sample Hazards: CORROSIVE

TO:
S-CUBED LABORATORIES
Company
3398 CARMEL MT. RD.
Address
SAN DIEGO, CA 92121-1095
City, State, Zip
RECEIVING DOCK
Attention:

HAZARDOUS MATERIAL SHIPMENT RECORD (HMSR)

Originating Facility: Building 1E3N Area 100N
Originator Signature: Mary Ann Green
Date: 4-8-93
FROM: [X] WHC [ ] KEH [ ] PNL [ ] OTHER ____

OFFSITE ONLY: SHIP: [X] PREPAID [ ] COLLECT
VIA: [ ] Parcel Post [ ] Air Parcel Post [ ] Freight (Rail/Truck)
~~[X] Air (Passenger)~~ (4-8-93) [X] Air (Cargo) Cost Code: ORG. 11150/E11457

SHIPMENT DESCRIPTION

Number of Containers	Type	DOT Spec	Package Dimensions	Quantity Pkg	Gross Wt Each Pkg	CONTENT DESCRIPTION (See 49 CFR 172.101(c) Hazardous Material Table)
1	CF	~~12A-10~~ 4G (LN 5-25-95)	11-3/16 X 11-3/16 X 14-3/4	16 oz (500 ML)	6 lbs	Proper Ship Name: SULFURIC ACID (4B) Hazard Class: ~~CORROSIVE MATERIAL~~ 8 (LN 5-25-95) UN/NA No.: UN 1830 PACKAGING GROUP 2, PACKAGING INSTRUCTIONS 809 List Secondary Hazards: NONE List Labels Req'd/Applied: CORROSIVE
				MOG 4-8-93		Proper Ship Name: Hazard Class: UN/NA No.: List Secondary Hazards: List Labels Req'd/Applied
						Proper Ship Name: Hazard Class: UN/NA No.: List Secondary Hazards: List Labels Req'd/Applied

Total No. Containers: 1
Gross Wt of Shipment: 6 lbs.
Identify Placards Required: 1. NA 2. ____ 3. ____ 4. ____
Identify Property Control or Return Order No.: (if applicable)

Material in manufacturers original container: [ ] Yes [X] No
Container free of deterioration or damage: [X] Yes
Container acceptability documented: [X] Yes
Material is packaged, sealed, marked and labelled to meet DOT requirements [X] Yes

Describe Internal Packaging:
Glass sample bottle wrapped in vermiculite, in a metal can inside a plastic bag. The can is placed inside a ~~12A-10~~ box.
4G LN 5-25-95

RADIATION RELEASE	Survey No.	Date	RM Signature	Print Name
	151504	4-8-93	RACook	Rick A. Cook

CERTIFICATION

CONTRACTORS CERTIFICATION

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transport according to the applicable regulations of the Department of Transportation:

This shipment is within the Limitations prescribed for: ~~[X] Passenger Aircraft~~ [X] Cargo Aircraft [ ] NA

Authorizing Signature: Mary Ann Green Print Name: Mary Ann Green Date: 4-8-93

FOR OFFSITE SHIPMENTS — ADDITIONAL APPROVAL REQUIRED

WHC TRAFFIC	B.L. No.	Date Shipped	ETA	Routing	Special Considerations
		4/8/93	4/9/93	FED X	

WHC Traffic: Greg O. Jones WHC Shipping: ____

EMERGENCY PHONE # 509-373-3800 DOT ERG GUIDE 39 ATTACHED

MAXWELL
S-CUBED Division

Lot No. 3605

Sample Log In Sheet

Revision No.: 0

Date Received: 4-9-1993 Date Sampled: 4-7-1993 Client Code: WHC DC No._____

Time Received: 11:30 **Data Due Date: 4-29-1993** **Report Mail Date: 5-7-1993**

Received by (Sig): Amy Smith Custody Seals Present/Intact (Y) N Reporting Level: FULL CLP

Airbill No._____ Chain of Custody Present/Intact (Y) N Turnaround Required: 30 DAY

Charge No. 32359-96 Client Forms Present (Y) N Quality Control Reqd'd: Level 3 (RCRA)

Case No./Project Code: 93-092 SDG No.: 3605

S-Cubed Sample No.	Sample Identification	Samp. Type	No. Cont.	Samp Stor.	Samp Cond	ICP6010	TOC								All Info Agree	Notes
3605-01	B08CM8	NAL	1A/1	WA/16		X	X									
3605-01MS	B08CM8MS	NAL	1A/1	WA/16		X	X									
3605-01MSD	B08CM8MSD	NAL	1A/1	WA/16			X									
3605-01REP	B08CM8REP	NAL	1A/1	WA/16		X										

Container Types

Water _____

_____

Soil _____

_____

Soil = Soil/Sediment/Sludge
Water = Aqueous
NAL = Non-Aqueous Liquid
NSS = Non-Soil Solid

Water MS,MSD_____

Soil MS,MSD_____

SDG Complete (Y) N

Review JDH/10

SC-03 Rev 8/92

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

3605-01

Lab Name: S_CUBED Contract: 32359-96

Lab Code: S3 Case No.: 93-09 SAS No.: SDG No.: 3605

Matrix (soil/water): SOIL Lab Sample ID: 3605-01

Level (low/med): LOW Date Received: 04/09/93

% Solids: 100.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	32.2	U		P
7440-36-0	Antimony	11.2	U		P
7440-38-2	Arsenic				NR
7440-39-3	Barium	1.0	U		P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	0.60	U		P
7440-70-2	Calcium	121	U		P
7440-47-3	Chromium	7.2			P
7440-48-4	Cobalt	2.6	U		P
7440-50-8	Copper	0.60	U		P
7439-89-6	Iron	444			P
7439-92-1	Lead	7.4	U		P
7439-95-4	Magnesium	81.8	U		P
7439-96-5	Manganese	3.8	B		P
7439-97-6	Mercury				NR
7440-02-0	Nickel	5.2	B		P
7440-09-7	Potassium	144	U		P
7782-49-2	Selenium				NR
7440-22-4	Silver	1.0	U		P
7440-23-5	Sodium	97.0	U		P
7440-28-0	Thallium				NR
7440-62-2	Vanadium	3.4	U		P
7440-66-6	Zinc	2.8	B		P

Color Before: BROWN Clarity Before: Texture: FINE

Color After: COLORLESS Clarity After: Artifacts:

Comments:

B08CM8

MAXWELL
S-CUBED

		CALIBRATION	
ANALYTE:	TOC	STD 2000ppm	1992
METHOD REF.	9060	STD 400ppm	402
DATE:	4/20/93	STD 10ppm	10.1
ANALYST:	MM	CAL BLANK	0.069
		TOC CONC. =(TOC READING*DIL. FACTOR)	
MATRIX:	WATER	DETECTION LIMIT=0.30mg/l	

SAMPLE ID. (S3)	TOC READING (mg/l)	DIL. FACTOR	TOC CONC. (mg/l)	CLIENT SAMP. ID
EBW0420	0.808	1	0.81	EBW0420
LCSW0420	395.98	1	396.0	LCSW0420
3605-01	33.72	1	33.7	BO8CM8